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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,841	02/19/2002	Hiroshi Ichibangase	2611-0177P	6192

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EXAMINER
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WANG, LEMING

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/049,841

Applicant(s)

ICHIBANGASE ET AL.

Examiner

Leming Wang

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 2/19/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 6-9, 11-13, 15 and 17-20 is/are allowed.
- 6) ☐ Claim(s) 1-5 and 14 is/are rejected.
- 7) ☐ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "band allocation unit" and "fixed bands" and "redundant bands" in claims 2 and 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2 and 10 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon "fixed band" and "redundant band" are not clearly defined in specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the slave stations" in page 55, lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "said slave stations" in page 62, line 25. There is insufficient antecedent basis for this limitation in the claim.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by *Yuki et al.* (US patent No: 6,778,557)

Regarding Claims 1 and 14, *Yuki et al.* teach that an optical multi-branched communication system (Fig.1) in which a plurality of slave station devices (10-1, 10-2, ..., Fig.1) share a transmission medium and a transmission band (Col.1, lines 19-23); a master station device (20, Fig.3) notifies band allocation information (Fig.12, 29, 57; Col.6, lines 27-28; Col.3, lines 32-37; Col.49, lines 4-6) for controlling allocation of transmission bands to be used for each slave station device to each of the slave stations; and each slave station device transmits transmission information to the master station device (Col.2, lines 50-54; Col.64, lines 13-19), based on band allocation information notified from the master station device (Col.2, 25-28), wherein said master station device comprises an extracting unit (24, Fig.3, Col.49, 7-14; 807 Fig.80, Col.68, lines 27-32; 803 Fig.83; Col.72, lines 20-21) which extracts traffic notification information (Col.49, lines 7-14, 32-35; Col.68, line 8; Col.72, lines 20-21) which is described in predetermined information (Col.16, lines 14-16; Col.49, lines 32-35) in the transmission information transmitted from each slave station device, notifies the traffic state of the transmission information.

Regarding claim1, *Yuki et al.* further teach the master station device performs allocation processing of the transmission bands (for example, Col.63, lines 38-49; Col.66, lines 35-38; Col.68, lines 39-45; Col.72, line 34; Col.86, lines 11-13;), based on the traffic notification information extracted by said extracting unit (24, Fig.3, Col.49, 7-14; 807 Fig.80, Col.68, line 8; 803 Fig.83; Col.72, lines 20-21), and notifies the allocated results to each of said slave station devices as the band allocation information (Fig.12, 29, 57; Col.2, lines 25-28; Col.3, lines 32-37; Col.6, lines 27-28; Col.49, lines 4-6).

Regarding Claim 3, *Yuki et al.* teach the band allocation information is allocated for each logical path (for example, Col.13, 35-44, according to the discussion of specification of page 26, line 22, "logical paths indicated by the VPI (VCI)," which is located in header portion of ATM cell) of the transmission information.

Regarding Claim 4, *Yuki et al.* further teach the band allocation information is payload-type information in ATM cell headers (Col. 34, lines 18-20; Col.76, lines 14-18).

Regarding Claim 5, *Yuki et al.* teach the said extracting unit (24, Fig.3, Col.49, lines 7-14; 807 Fig.80, Col.68, line 8; 803 Fig.83; Col.72, lines 20-21) outputs the transmission information after changing the traffic notification information again (Col.49, lines 7-14, 32-35, 40-43).

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Regarding claim 14, *Yuki et al.* further teach an allocation processing of the transmission bands performed (for example, Col.68, lines 39-45; Col.63, lines 38-49), based on the traffic notification information extracted by said extracting unit (24, Fig.3, 806 and 807 Fig.80, 803 Fig.83), and the allocated results are allocated to each said slave station devices as the band allocation information (Fig.12, 29, 57; Col.2, lines 25-28; Col.3, lines 32-37; Col.6, lines 27-28; Col.49, lines 4-6).

7. Claim 15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 6 - 9, 11 -13, 15, and 17- 20 are allowed over prior art of record:

The following is an examiner's statement of reasons for allowance:

As to claims 6, 15, and 17, the prior art of *Yuki et al.* (US patent No: 6,778,557), *Van Der Plas et al.*, US patent No: 5,353,285, *Aimoto et al.*, US patent No: 6,144, 636, and *Mekkittikul et al.*, US publication No: 2005/0013248 does not fairly teach or suggest each of the slave stations devices comprises a congestion detection unit which detects whether the resident quantity of transmission information to be transmitted to the master station device is equal to or larger than a predetermined threshold; a changing unit which changes the contents of the traffic notification information, which is described in

predetermined information of the transmission information, to a congestion state, when the congestion detection unit detects that the resident quantity is equal or larger than the predetermined threshold, and notifies the traffic state of the transmission information; a method comprising the step of a congestion detection in which, each of slave station devices detects whether the resident quantity of transmission information to be transmitted to the master station device is equal to or larger than a predetermined threshold; a changing step in which, when it is detected at the congestion detection step that the resident quantity is equal to or larger than the predetermined threshold, the contents of the traffic notification information, which is described in predetermined information of the transmission information, and notifying the traffic state of the transmission information, are changed to a congestion state, in addition to the other limitations recited in claim 6, 15, and 17.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. *Van Der Plas et al.*, US patent No: 5,353,285, is about time slot management for a system with a master station and a plurality of slave stations.

2. *Hoebeke et al.*, US patent No: 5,898,670, is showing a bursty traffic multiplexing arrangement for a plurality of burst inputs.

3. *Aimoto et al.*, US patent No: 6,144, 636, is about bandwidth management for giving notice of congestion state.

4. *Mekkittikul et al.*, US publication No: 2005/0013248, is about method and system allocation tracking in packet data network.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leming Wang whose telephone number is 571 272 3030. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272 3112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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M. R. SEDIGHIAN  
PRIMARY EXAMINER